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The STUDENT is happy to acknowledge the receipt of a handsome list of subscribers from Mr. Levi Knowlton, Secretary of the Utica, Licking county, Farmers' Institute. We wish to commend Mr. Knowlton's example as one we would like to see followed by all the Institute Secretaries, Grange Secretaries, Fair Board Secretaries and Presidents, and any and everybody else who feels an interest in the work of agricultural education, and believes, as we think all do, that this work can be helped by getting for the AGRICULTURAL STUDENT as many subscribers as possible.

We have made the rate for the next five months merely nominal, and will do more. We will extend for one year the subscription of any one sending us in ten new names and \$1.00. Now everybody go to work, and let us do a labor of love for a cause in which we must all be interested, and the good of which will be our good.

Institutions of learning are not complete successes unless they succeed in impressing upon those whom they send into the world, the fact that their relation to them does not end with graduation or their departure from the institution. Nothing better insures the life of an institution than a large number of men and women whose hearts are warm toward it and to any enterprise that is for its good. THE AGRICULTURAL STUDENT has been launched forth for the one purpose of aiding our University and enlightening the farmers of the State concerning it. We believe O. S. U., has strong friends both outside and among her alumni and ex-students. In a circular letter the business manager of this journal urges the importance of the support of the alumni and all ex-students. We wish to strongly impress upon all the importance of such support from all loyal friends of the University.

We ask your help in way of subscription and continue to ask the help of your pen.

Come forth, ye loyal ones. Now is the accepted time.

A great number of farmers, even some college students fail to appreciate the value of current literature and neglect to avail themselves of it. One does not become a broad and practical man but by study and thought; and this does not come simply through books. The world is full of new thought; men of genius live to-day as they have in the past. The world, in the present time, has her great thinkers, and agriculture has her full share. In no way can one better come into contact with this thought and catch the spirit of the new movements in agriculture than by reading the agricultural journals. The plea of "not time enough" has some basis, but is not sufficient for excuse. He who best serves self and others, is the broad and practical man, made what he is by delving into the new fields, and profiting by the new ideas in current literature.

The man who is always looking ahead for emergencies and preparing to meet them, is usually called the lucky man. There is never an opportunity but that he is ready to make the best of it.

This is true of the student of to-day, and will be true of those who come after him. A man gets to college because he has availed himself of the opportunities at hand. All, in a degree, have these opportunities. The wise are the lucky ones; they see an opportunity and seize it. One of the greatest opportunities to the farmer boys of our state to receive a college education is offered by the trustees of the Ohio State University, as a free scholarship in the courses in agriculture. These scholarships are good for two years and cover all college dues.

Every county is entitled to a scholarship annually. Nearly one hundred boys have grasped this opportunity and are now enrolled in the several courses in the Agricultural Department. Yet, not one half of the scholarships are used, and who is to blame? Certainly not the University which has so generously offered these scholarships. Is it not the duty of the farmers of each county to see that they are represented by at least two good representatives here at the University every year?

The time has come when all see the great need of educated men in agriculture. No better field opens up to the educated man than work in this line of study and research.

Boys, avail yourself of this opportunity. Begin now. Lay your plans to attend here the next year. Apply to the county board of agriculture at once for a free scholarship. It is not too soon, and to put off may be too late. Any information that you desire concerning the scholarships or the University will be gladly given.

Write for any information you want. Address The AGRICULTURAL STUDENT, or the Secretary of the School of Agriculture.

Come and join us; your greatest duty to yourself and others is to develop yourself.

If thy mind is strong and great
Fail not, yourself to educate;
If thy mind is weak and spent
There's greater need of development.

We desire to emphasize the fact of beginning at once.

Your fathers established the University for your good; it is here ready to help you, what will you do?

The lectures of Professor Morrow, delivered before the agricultural students, on Milk, its Producers and Production, have surpassed all expectations.

This subject, broad as it is, was handled in a complete and comprehensive manner. One needed but to see and hear to be convinced of the great earnestness and intelligent manner with which the speaker handled the subject. His chief aim was to make the lectures practical and serviceable to the students. In all of Professor Morrow's lectures or talks there predominates, in the highest degree, all that which is educational and inspiring. What he said was not theory, but the result of experience of many years.

Many of our readers will recall the little retrospective prophecy which appeared in our December, '94 issue, from the pen of Forrest P. Stubble, giving a vivid outline sketch of the good results destined to accrue from the policy—of which he is a staunch advocate—of teaching in the rural common schools the principles of the sciences underlying the arts of agriculture and horticulture.

We are glad to say that within two weeks after this prophecy appeared, the Ohio State Grange carried out to the letter, the initiative part assigned it to perform, by adopting by unanimous vote the following resolution:

WHEREAS, A knowledge of the elements of the sciences underlying the art of agriculture is necessary to our children, to enable them to success-

fully meet the increasing intellectual demands upon the farmer; and that teachers in our schools who are able to lead young minds into observation of, and direct them to sources of information concerning, the facts of these sciences, are necessary to the acquirement of this knowledge; therefore,

Resolved, That we favor the early passage of a law requiring, along with the necessary preliminary steps, that, after June 1, 1900, teachers, before being certificated to teach in our rural common schools, shall pass satisfactory examinations in physics, botany, chemistry, zoology, and geology, and their application to the Arts of Agriculture and Horticulture.

THE AGRICULTURAL STUDENT is in receipt of two pamphlets, written in the Chinese language,—one on the subject of Agricultural Chemistry, the other on Immortality. These books were written by Rev. W. P. Bentley, who graduated at the O. S. U. with the class of '85, and received the degree of Bachelor of Agriculture, and who is now located at Shanghai, China, in the capacity of a missionary of the Christian Church.

We cannot but admire the man who having learned the language of a great and comparatively unadvanced people, endeavors to introduce into their sphere the principles at least, of so necessary a science as Agricultural Chemistry; and at the same time providing food for the spiritual nature of the people. We cannot read these books, but knowing who and what the author is, we can truthfully and conscientiously say that they are of a high order.

Agricultural Boards, Attention.

The attention of County Boards of Agriculture is especially called to the points on another page of this issue concerning the free scholarships in agriculture and horticulture, given to each county through its agricultural board. These boards as the custodians of their respective counties' agricultural welfare have a responsibility

placed upon them, and a duty to perform regarding these scholarships. They should see that the young men of their counties know of them, and they should make special efforts to bestow each scholarship on a worthy and strong young man, that the county may reap the full benefit therefrom.

We will send MILLS' AND SHAW'S ELEMENTARY PRINCIPLES OF AGRICULTURE, postage paid, to any one sending us fifty new subscribers under the special ten cent rate. Boys, this is the chance of your life to earn a book which will open up a book to you on every field on the farm, one in the garden, one in the orchard, one in each; the horse barn, the cattle barn, the dairy barn, the granary, the pig pen, the poultry house and many other places about the farm, and will also show you where the gold is hidden in the manure pile and how to get it out. Let us see who will be first to earn one and discover all the remainder of these books.

The prevalence of hog cholera in some parts of the state has taken on an alarming appearance. In some sections of the state nearly all of the hogs have succumbed to this dreaded disease.

It is a sad affair, too, that so many farmers hesitate to try any preventive. One of the most certain preventives is the so-called inoculating process, discovered by Professor Detmers. The want of knowledge regarding this process, is perhaps, the greatest reason why people fail to appreciate the method. Dr. Detmers has spent many years in perfecting the discovery. It has been supplemented by numerous experiments and actual practice, and the certainty of it as a preventive is unquestioned. Professor Detmers has now a supply of the inoculating fluid and will be glad to go to any part of the State.

It behooves the farmers of the state to fight this disease, and this is the easiest and safest way out of the difficulty.

HENRY A. WEBER, Ph. D.

Professor of Agricultural Chemistry at the Ohio State University.



Professor Weber was born near Columbus, Ohio, July 12, 1845. After spending two years at Otterbein University, he went abroad in order to take up the study of chemistry and entered the Polytechnic School at Kaiserslautern in the Palatinate in 1863. Three years latter he entered the University at Munich, Bavaria, where he studied chemistry under Baron Liebig and Dr. Reischauer, mineralogy under Professor von Kobell, and physics under Professor Jolly. In 1868 he returned to this country, and in 1869 was appointed assistant chemist on the Geological Survey of Ohio, in which capacity he served for five years, and gave all his time to the chemical analysis of the minerals and soils of the State.

In 1874 he was called to the chair of general chemistry in the University of Illinois. During his stay at this institution he also served as chemist to Illinois State Board of Agriculture and to the Illinois State Board of Health. In the latter capacity he made an exhaustive examination of the condition of the river waters of that state. He planned the new chemical laboratory of the University of Illinois, which, at the time of its erection, was one of the most commodious and complete chemical laboratories of the West. At this time he also published his "Select Course in Qualitative Analysis." From 1879

to 1882, Professor Weber in connection with Professor M. A. Scovell, made exhaustive researches and experiments with sorghum as a sugar producing plant. As a result of these experiments a number of sorghum sugar factories were started, one at Champaign, Illinois, where probably the first sorghum sugar was manufactured on a commercial scale.

In 1882 Professor Weber left the University of Illinois and gave his whole time and labor to the development of the new agricultural industry.

In 1884 Professor Weber was elected to the Chair of Agricultural Chemistry at the Ohio State University, in which capacity he is still serving. He has seen his department grow year by year from four students the first term to seventy-five at the present writing.

On the establishment of the Ohio Dairy and Food Commission in 1886, Professor Weber was appointed State Chemist by Governor J. B. Foraker, and took the oath of office. He has been serving in this capacity ever since, and in addition to assisting and advising in the work of the commission, has taken an active part in the formation and passage of our pure food laws.

FREE SCHOLARSHIPS

In Agriculture and Horticulture given by O. S. U. to the Counties of Ohio. Some Points . Concerning These Scholarships.

Each county in Ohio may appoint one student, either *male or female*, each year to a free scholarship.

A scholarship is good for: First, the two years in the short course in Agriculture; or, second, the first year of the short course and the Freshman year of the long course; or, third, the first year of the short course in Agriculture and the Freshman year of the course in Horticulture and Forestry.

If there be a County Agricultural

Society the appointment is to be made by it; otherwise the Farmers' Institute of the county is entitled to make the appointment.

If there be neither an Agricultural Society nor Farmers' Institute, any county farmers' organization, as Grange, Alliance, Club, etc., is entitled to make the appointment.

The scholarship covers incidental and laboratory fees, leaving the holder to provide for himself board and lodging, books and clothing.

Books cost somewhere from \$12 to \$20 per year.

Board and lodging, including fuel, light, etc., if one does his own housework, as many students do, will cost in cash from \$40 to \$75 per year. If one takes a room, and boards in club or private family, as most do who can afford it, the cost will be somewhere from \$130 to \$200 per year, or more, as you choose to make it. That is to say, it is quite possible for one with a free scholarship to spend a year at the University with no greater outlay of money than \$100, aside from clothing, railroad fare, etc. In fact some have done this on considerably less than \$100.

Something like \$6,000 is paid annually by the Departments of Agriculture and Horticulture to students for labor, besides a considerable sum by other departments, and quite a large amount by city residents near the University grounds.

We do not recommend any young man to attempt a course without from \$50 to \$100 to begin with, though in individual cases \$20 have proved sufficient, all other necessary money being earned during the school year, including vacations.

If you have been appointed to a free scholarship, and find that you can not attend the University, it is your duty to resign your scholarship at once, in order that some one else may have a chance. The scholarship will expire as soon if *not* used as if used, and if not used the agriculture of your county loses the benefits.

If you use your scholarship it will

save you \$75 during the two years; otherwise it is worth nothing to you, as you cannot transfer it to another.

The scholarships are good only for Agriculture or Horticulture, except that if the appointing power in any county should have no applicant for the Agricultural or Horticultural course, that power may *then* appoint an applicant who wishes to take the course in Veterinary Medicine. *That* scholarship will then be good for two years in the School of Veterinary Medicine.

If you wish to study Agriculture or Horticulture, or follow any line of work in these general subjects, and the scholarships due your county are taken, and you can not persuade the appointing power of any other county to appoint you, come and take a course any way. You cannot afford to neglect such important preparation for your work on account of the additional expense, especially when the expense is so small. If you have not enough money to enable you to take a full course of four years, or the short course of two years, spend one year here; or even less, if you can do no better.

The opportunities open to graduates of the long courses of this School of Agriculture are at least as great as those open to graduates of any regular undergraduate course in any school in America.

The competition to be met by the educated agriculturist or horticulturist is much less formidable than that to be met by educated men in almost any other calling.

If you think of taking a course in Agriculture, write any of the editors of this journal, or to the Secretary of the School of Agriculture.

Of course all students can not have scholarships, neither can all get work, but fortunately all do not want or need either the scholarships or the work.

Although strictly legitimate, the Horticultural Department of the University is just now engaged in an extensive "green goods" business.

An Ohio Farmer's Co-Experimental Union.

The year 1895 will see ex-students and alumni of the School of Agriculture of O. S. U. in nearly every county of our State. These have a scientific knowledge of agriculture far greater than have the average of the farmers of our State. They were enabled to procure this knowledge, largely by aid of their fellow farmers, through governmental establishment and maintenance of this school. They owe much to their fellow farmers because of this and, also, because of their greater capability—our responsibility to our fellow men is measured not so much by what we have received from them as by our ability to help them—so we should do what we can to help our fellow farmers, especially through such means as will enable us to help ourselves; each one himself and each the other, while doing the most for them.

In view of these two facts here apparent, first, that we have the material at hand for the work, and second, that the work should be done from the standpoint of duty both to ourselves and the farmers of our State; we believe that immediate steps should be taken to organize a co-operative experimental association in Ohio, and we suggest that the Association of Agricultural Students should take the initiative in this matter, and that the ex-students and alumni of the School of Agriculture of O. S. U., be made the basis for the beginning, but that membership in the association be open to all earnest, active, intelligent farmers of Ohio who care to incur the trouble and expense of active co-operation in the work.

As a means for furnishing data of scientific and practical value concerning many of the questions confronting Ohio farmers, such an association would be unsurpassed. Co-operative experiments along any line carried on simultaneously and under one direction in each of the separate and distinct environments, presented by the State for that line of work, would be worth vastly more than the same amount of

work done in one or even a half dozen counties. Each one of us when we come to farm for ourselves will want many questions solved which can be solved only by wide and extended experimentation. What an opportunity such an association will afford for mutual aid!

Besides, our individual work in such an association, will do much to keep us in line with the best thought and action of our times along the lines of our business. It will be one of the best antidotes for that dormancy, which at times steals upon us unawares. Then, too, we need some common work to unify us, to harmonize us, to bind us together in friendship and in labor; that we may have the advantages of that strength which comes from union, in any work we may find to do, and in emergencies which force themselves upon us. But there is no need to multiply words—each one when he thinks the matter over will see for himself abundant reasons for the formation of such an association.

Encouragement for the Study of Forestry.

A bill has been recently introduced in Congress which ought to have the cordial support of every one interested in the permanent prosperity of our country.

The special purport of the bill is to so amend the "Morrill act," to which our University owes its existence, that each State and Territory shall annually receive from the general government an additional appropriation of \$5,000, for the purpose of promoting the study of forestry. There are few subjects relating to the welfare of our State and country that demand more serious attention. To show how our best timber trees can be cheaply and successfully grown from seed; to determine which are the best varieties for different soils and exposures; to point out and illustrate the effect of forests upon temperature and rainfall; to promote in every possible way the planting of waste lands with valuable

timber trees; to preserve and extend our existing wood land, is to render the State a service of signal value.

Our University has been one of the pioneers in giving instruction in these subjects, and an unusual degree of interest has been manifested by some of the students who have graduated from the Department of Horticulture and Forestry.

We must confess, however, that the equipment is wholly inadequate for the work that should be done.

Should the bill just referred to become a law there is no reason why we should not have one of the best schools of forestry in the country.

Write to your congressman and urge him to vote for the "Hainer bill."

Instructions in Dairying at the Ohio State University.

The dairy laboratory which has been recently equipped for instruction in butter and cheese making was opened January 2d, and instruction is now being given to forty students. The laboratory consists of one main room, 35x55 feet, and several smaller rooms,—receiving room, cold storage room, cheese curing room, and locker room. The main room is fitted up with hand and power machinery. There are four receiving vats, two power and three hand separators, three power and five hand churns, three power and four hand workers, five Babcock testers, cream vats, printers, and all essential apparatus for butter making. Later in the term apparatus for cheese making will be put in place.

Two or more students start with a known quantity of milk, determine by testing the pounds of fat contained; then with first one and then another separator, they determine the amount of milk skimmed per hour with a given speed of the machine and temperature of the milk. The fat in the skimmed milk and the cream is then determined. This cream is ripened and churned and the butter salted and worked, all the conditions being carefully noted so that the efficiency

of various methods of butter making by different machines may be tested by the students themselves. All this work is under the guidance of expert instructors.

It is a pleasing sight to see the students at work in their white duck-suits, and the training they obtain must be invaluable.

In addition to the practical work in dairying, there is given instruction in milk chemistry, in dairy bacteriology, in veterinary medicine, and on the breeds, selection, food, care and management of dairy cattle, and upon butter and cheese making.

There are a great many creameries in Ohio idle, or barely struggling to maintain themselves. There are different reasons for this condition of affairs in many localities, but in many cases not the least of the causes is the lack of a thorough knowledge of the business by the operator of the creamery or factory. This difficulty the dairy school is trying to rectify by training young men thoroughly for their work. A number of young men in the course have already had considerable experience in butter making and with the training they get at the dairy school will be competent to take full charge of creameries.

In the school of agriculture there are eighty-five students, many of whom are receiving training fitting them in other lines than dairying, such as stock-farming, gardening, and fruit-raising. Not all of these men are seeking positions as many already have satisfactory arrangements in view, but some are. The University would therefore be glad to have correspondence with those who wish to employ men trained in butter making, dairy farming, stock farming, gardening, or fruit raising. Letters may be addressed to Professor Thomas F. Hunt, Columbus, Ohio.

The Ohio State Horticultural Society will hold its second meeting for the winter in the city of Toledo, February 20th and 21st. An excellent program is promised.

Sterilizing and Pasteurizing of Milk.

The sterilizing and pasteurizing of milk has of late received a great deal of attention from the people of the United States. This attention has probably grown out of the recent "tuberculosis scare." At least most writers upon the sterilizing or pasteurizing of milk seem to make the destroying of the germ of that disease the principle object in this treatment of the milk. Looking at it in that way has caused a great many to lose faith in these efficient means of getting rid of the disease germs in milk. They are made to think that other germs are not often found in milk. The importance given to getting rid of the dangerous disease of tuberculosis has obscured, to some extent, the dangers of other diseases which are more likely to be taken into the system through a drink of raw milk, than perhaps is tuberculosis. It matters not to us whether diphtheria or typhoid fever is more dangerous than tuberculosis, but we are interested in knowing how dangerous either is. We want to know how many chances we have of getting any of these. They are all bad enough. We are more interested in how we can keep from being infected. The Germans and other Europeans have a quick way to answer this question. They would say boil the milk. They would no more think of using raw milk than we would of eating raw beef.

It is of little use to-day to tell Americans to boil milk, for this, most of them will not do. They do not like the taste of boiled milk. Some even go so far as to say boiling makes it less digestible. But is there any proof of this? It would seem strange that the Germans are not more dyspeptic. The Germans, as a nation, are not particularly noted for being troubled with indigestion, and they use boiled milk throughout life.

To those who do not like boiled milk perhaps pasteurized milk might be recommended. To pasteurize

milk is to raise it to a temperature of 165° F. It is said that the flavor of the milk is not changed when its temperature is not raised above this point.

In one of our agricultural papers there are some questions asked about sterilization of milk, each one of which is answered with "no!" If I were to answer these questions I should not answer them quite that way. Here are the questions and my answers:

1st. "Does sterilization remove filth from milk?" What is filth? Anything that does not belong in the milk. Perhaps sterilization will not remove the cow hairs, and the pieces of dirt that might get into milk, but it will kill the bacteria and since the other filthy ingredients may be strained out, we have a means of making a pure article by sterilization.

2nd. "Does sterilization remove bacteria?" Boiled bacteria are no longer injurious organisms. Their remains may be in the milk. Perhaps, since bacteria are so closely related to mushrooms, sterilization may add considerable value to the milk because the bacteria are prepared to be eaten.

3rd. "Does sterilization remove ptomaines?"

4th. "Does sterilization remove toxic products generated by the action of bacteria?" It seems to me that these last two are rather absurd questions. These substances have to be formed by the bacteria, which takes some time. No one is going to wait until milk has become unfit for use before he sterilizes.

The object in answering these questions as has been done, was not to contradict what some one has said, but I took them as samples of questions that are so often asked. Then too, these have special importance because they were asked by one of our dairy-men through an agricultural paper.

To recapitulate: We sterilize not only to destroy tuberculosis germs, but germs of all infectious diseases.

It does not necessarily affect the

digestibility. It should be done as soon as practicable after the milk has been drawn from the cow.

As to the danger of contracting disease from drinking raw milk that has disease germs in it, it might be said that the perfectly healthy stomach is quite able to get rid of the germs without the least harm to the body. But persons that have weak stomachs, and babes who have trouble with their digestive organs, should have their milk freed from these dangers. The safer plan surely would be to boil all milk, as no one knows when his stomach is in condition not to be harmed by the germs.

Bone with Crushed Shell.

It will be remembered by the readers of our paper that an experiment was started November 1st, to test the value of green bone as a food for laying hens. The experiment was started with four divisions and two pens in each division, one of old hens and one of pullets, ten to each pen; first division receiving green ground bone, crushed oyster shell and gravel; second division receiving green ground bone and gravel; third division receiving crushed oyster shell and gravel; fourth division receiving gravel only.

Table showing *weekly* results from November 1 to January 24 inclusive.

I DIVISION		II DIVISION		III DIVISION		IV DIVISION	
10 Pull'ts	10 Hens	10 Pull'ts	10 Hens	10 Pull'ts	10 Hens	10 Pull'ts	10 Hens
7	3	12	0	6	0	10	0
5	1	9	2	3	0	4	0
5	0	6	2	2	0	0	1
4	4	5	3	4	0	0	1
17	13	8	4	4	0	0	5
20	13	12	12	7	0	2	4
11	14	9	9	2	0	2	1
5	7	1	10	7	0	1	0
6	0	3	13	4	0	4	0
12	3	10	11	9	2	4	0
18	1	15	5	12	1	9	1
30	5	25	9	19	1	16	0
140	64	115	80	79	4	52	13
204		195		83		65	

Eggs were worth 2c. each on the average during the trial.

First division received 14 lbs. raw ground bone, 2 lbs. oyster shells and all the gravel they wanted.

Second division received 14 lbs. raw ground bone and all the gravel they wanted.

Third division received 6 lbs. oyster shells and gravel.

Fourth division received nothing but gravel.

Counting bone at 3c. per lb. and shells at 2c, the hens with bones more than doubled in value of eggs either those of shell or nothing.

There was enough difference in those fed shell to more than pay for the shell, but leaves a narrow margin when fed with bone. While those fed bone more than doubled on those fed nothing, or we could have afforded to pay 20c. per lb. for the raw ground bone. But this is not all; the hens receiving bone have a much better plumage, and are standing the winter much better. We hope to draw many valuable conclusions from this experiment when it is finished.

It might not be out of place to mention that these hens have not been out of their 7x8 ft. pens for about a month, before this time they had had the run of a yard 6x16 ft., giving all exactly the same chance to exercise.

The pig feeding experiment with dry whole wheat, soaked whole wheat, wet ground wheat and dry whole corn is still in progress. The experiment thus far has been fairly satisfactory, but not so much so as the experiment we conducted in the Spring of 1894, owing to the fact that some of the pigs are not as good or the lots so even. The experiment has been in progress twelve weeks. The pigs averaged about 75 pounds when the experiment was begun, and have made a fair gain with the exception of two. They have gained on an average about 120 pounds in twelve weeks. On the sixth week one pig of the dry wheat lot suddenly died, and one of another lot has turned out to be a pig that will not fatten. It has gained only thirty pounds in the the twelve weeks. We think the ex-

periment will close in time to give result in April STUDENT.

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Dec-1yr

Agriculture Lecture Course.

The following lectures in the course will be given during February:

On Thursday, February 7, Mr. H. P. Miller, Sunbury, O., editor of the sheep department of the *Ohio Farmer* will lecture on the Conditions of Profitable Sheep Husbandry.

On Wednesday and Thursday, February 13 and 14 there will be given two lectures on Soil Physics, by Professor Milton Whitney, chief of the division of agriculture soils, Washington, D. C. He will lecture on "The Structure and Physical Properties of Soils," and "The Relation of Soils to Crops."

On Tuesday, February 19 an Udder Study, and on Wednesday, February 20 the Evolution of the Dairy Cow, by Prof. C. S. Plumb, director of Indiana Experiment Station and professor of animal husbandry, Purdue University, Lafayette, Ind. The last four lectures will be illustrated with the lantern.

A Great Offer; for a Purpose.

We wish every farmer in Ohio to read the AGRICULTURAL STUDENT. We wish every one to become thoroughly acquainted with his University and with his School of Agriculture. This is our wish. Our purpose is to gratify this wish. Our offer is, to send any one in Ohio, not an alumnus, or employe of the University, the AGRICULTURAL STUDENT from now until July, 1895, for 10 cents. Postage stamps taken- Address the business manager,

F. P. STUMP,
Columbus, Ohio.

W. S. Devol, B. Agr., '86, has just been elected professor of agriculture and horticulture in the University of Arizona, located in Tucson.

Professor Devol was an assistant in the department of botany and horticulture for several years when that department was in charge of Professor Lazenby. Subsequently he held the position of superintendent of the University farm and as botanist of the Ohio Experiment Station.

In 1889 he went to Nevada as agriculturist and horticulturist to the experiment station of that state, and while there he was elected to the chair of agriculture and horticulture in the University of Nevada, in the city of Reno.

In 1890, his health failing, he removed to southern California, since which time he has been engaged in horticultural journalism. It is understood that Professor Devol will have charge of the work in agriculture and horticulture of the Arizona Experiment Station, as well as occupying a chair in the young University at Tucson.

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Mr. Charles P. Fox is at present Professor of Agriculture in the Agricultural College at Moscow, Idaho. He graduated from O. S. U. with the class of '89. Previous to his present engagement he was one of the staff of the Experiment Station of Missouri.

From all accounts Professor Fox is making a thorough success in his chosen profession and we prophesy for him a bright future.

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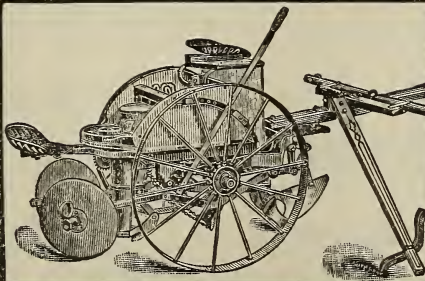
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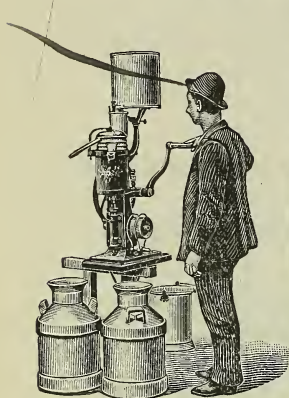
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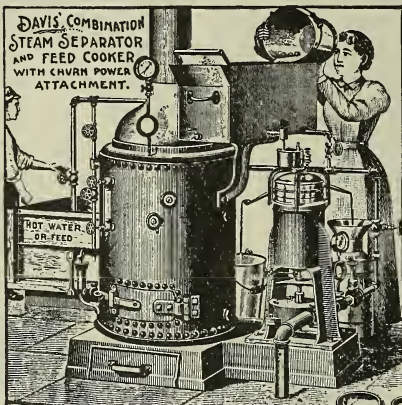
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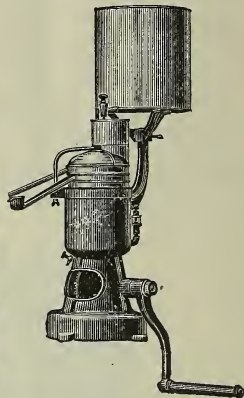
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